

**REQUEST FOR PARTICIPATION IN THE PATENT PROSECUTION HIGHWAY (PPH) PROGRAM BETWEEN THE JPO AND THE USPTO**

Application No.:	10/581,910	First Named Inventor:	Tadamasa TOMA et al.
Filing Date:	June 7, 2006	Attorney Docket No.:	2006_0843A
Title of the Invention:	PICTURE CODING APPARATUS AND PICTURE DECODING APPARATUS		

THIS REQUEST FOR PARTICIPATION IN THE PPH PROGRAM ALONG WITH THE REQUIRED DOCUMENTS MUST BE SUBMITTED VIA EFS-WEB. INFORMATION REGARDING EFS-WEB IS AVAILABLE AT [HTTP://WWW.USPTO.GOV/efc/efs\\_help.html](http://www.uspto.gov/efc/efs_help.html).

APPLICANT HEREBY REQUESTS PARTICIPATION IN THE PATENT PROSECUTION HIGHWAY (PPH) PROGRAM AND PETITIONS TO MAKE THE ABOVE-IDENTIFIED APPLICATION SPECIAL UNDER THE PPH PROGRAM.

The above-identified application (1) validly claims priority under 35 U.S.C. 119(a) and 37 CFR 1.55 to one or more corresponding JPO application(s) or to a PCT application that does not contain any priority claim, or (2) is a national stage entry of a PCT application that does not contain any priority claim.

**The JPO/PCT application number(s) is/are:** JP 2004-165006 (JP Application No. 2006-519671 that contains the allowable/patentable claims is the JP National Stage Application of PCT/JP2005/010441 and claims internal priority to JP 2004-165006, which is also the priority application claimed in this U.S. application).

**The filing date of the JPO/PCT application(s) is/are:**

**I. List of Required Documents:**

- a. **A copy of the latest JPO office actions (other than "Decision to Grant a Patent"\*) in the above-identified JPO application(s)**

- ☒ Is attached.
- ☐ Is available via Dossier Access System. Applicant hereby Requests that the USPO obtain these documents via the Dossier Access System.
- ☐ No Office Action from the JPO application is submitted since the JPO application received a first action allowance.

\*It is not necessary to submit a copy of the "Decision to Grant a Patent" and an English translation thereof.

- b. **A copy of all claims which were determined to be patentable by the JPO in the above-identified JPO application(s)**

- ☒ Is attached.
- ☐ Is available via Dossier Access System. Applicant hereby Requests that the USPO obtain these documents via the Dossier Access System.

- c. **English translations of the documents in a. and b. above along with a statement that the English translations are accurate are attached (if the documents are not in the English language).**

- d. **(1) An information disclosure statement listing the documents cited in the JPO office actions**

- ☐ Is attached. **\*No documents were listed in the JPO Office Action. No Information Disclosure Statement is necessary**
- ☐ Has already been filed in the above-identified U.S. application on \_\_\_\_\_
- ☐ Since there were no Office Actions prior to allowance, there were no references cited in a JPO Office Action

- (2) Copies of all documents (except for U.S. patents or U.S. patent application publications)**

- ☐ Are attached. **\* No documents were listed in the JPO Office Action**
- ☐ Have already been filed in the above-identified U.S. application on \_\_\_\_\_

This collection of information is required by 35 U.S.C. 119, 37 CFR 1.55, and 37 CFR 1.102(d). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

(continued)

## II. Claims Correspondence Table:

**IV. Payment of Fees:** The petition fee under 37 CFR 1.17(h) as required by 37 CFR 1.102(d) must be paid via EFS-Web (using credit card, authorization to charge a deposit account, or electronic funds transfer).

45,794  
Registration Number

【書類名】特許請求の範囲

【請求項 1】

複数のピクチャを符号化して、符号化された複数のピクチャを含んで構成されるランダムアクセスユニットを、ストリームの一部として生成する画像符号化装置であって、

前記複数のピクチャをそれぞれ符号化することで複数のピクチャ符号化データを生成する符号化手段と、

前記ピクチャ符号化データごとに、当該ピクチャ符号化データを復号するために参照されるパラメータ群たるピクチャパラメータセット情報を生成する情報生成手段と、

前記ランダムアクセスユニットを構成する複数の格納単位のそれぞれに、前記複数のピクチャ符号化データを1つずつ格納する第1の格納手段と、

所定の条件に基づき、

前記ピクチャパラメータセット情報を、前記複数の格納単位のうち先頭の格納単位、または、当該ピクチャパラメータセット情報を参照するピクチャ符号化データが格納されている格納単位に格納する第2の格納手段とを備え、

前記第2の格納手段は、前記先頭の格納単位に複数のピクチャパラメータセット情報を格納し、前記先頭の格納単位に格納するピクチャパラメータセット情報の数に制限を有する

ことを特徴とする画像符号化装置。

【請求項 2】

請求項1記載の画像符号化装置により生成されたストリームから、ランダムアクセスユニットを取得し、前記複数のピクチャ符号化データを復号する画像復号装置であって、

少なくとも、前記ランダムアクセスユニットの先頭の格納単位に格納されているピクチャ符号化データが特定されるように、前記複数のピクチャ符号化データの中から、一部の復号すべきピクチャ符号化データを特定するピクチャ特定手段と、

前記先頭の格納単位、または前記復号すべきピクチャ符号化データが格納されている格納単位から、当該復号すべきピクチャ符号化データを復号するために参照されるパラメータ群たるピクチャパラメータセット情報を取得する取得手段と、

前記ピクチャパラメータセット情報を参照することで前記復号すべきピクチャ符号化データを復号する復号手段と

を備えることを特徴とする画像復号装置。

【請求項 3】

複数のピクチャを符号化して、符号化された複数のピクチャを含んで構成されるランダムアクセスユニットを、ストリームの一部として生成する画像符号化方法であって、

前記複数のピクチャをそれぞれ符号化することで複数のピクチャ符号化データを生成する符号化ステップと、

前記ピクチャ符号化データごとに、当該ピクチャ符号化データを復号するために参照さ

れるパラメータ群たるピクチャパラメータセット情報を生成する情報生成ステップと、

前記ランダムアクセスユニットを構成する複数の格納単位のそれぞれに、前記複数のピクチャ符号化データを1つずつ格納する第1の格納ステップと、

所定の条件に基づき、

前記ピクチャパラメータセット情報を、前記複数の格納単位のうち先頭の格納単位、または、当該ピクチャパラメータセット情報を参照するピクチャ符号化データが格納されている格納単位に格納する第2の格納ステップとを含み、

前記第2の格納ステップでは、前記先頭の格納単位に複数のピクチャパラメータセット情報を格納し、前記先頭の格納単位に格納するピクチャパラメータセット情報の数に制限を有する

ことを特徴とする画像符号化方法。

#### 【請求項4】

請求項3記載の画像符号化方法により生成されたストリームから、ランダムアクセスユニットをストリームから取得し、前記複数のピクチャ符号化データを復号する画像復号方法であって、

少なくとも、前記ランダムアクセスユニットの先頭の格納単位に格納されているピクチャ符号化データが特定されるように、前記複数のピクチャ符号化データの中から、一部の復号すべきピクチャ符号化データを特定するピクチャ特定ステップと、

前記先頭の格納単位、または前記復号すべきピクチャ符号化データが格納されている格納単位から、当該復号すべきピクチャ符号化データを復号するために参照されるパラメータ群たるピクチャパラメータセット情報を取得する取得ステップと、

前記ピクチャパラメータセット情報を参照することで前記復号すべきピクチャ符号化データを復号する復号ステップと

を含むことを特徴とする画像復号方法。

#### 【請求項5】

複数のピクチャを符号化して、符号化された複数のピクチャを含んで構成されるランダムアクセスユニットを一部に有するストリームをコンピュータ読み取り可能な記録媒体に記録する記録方法であって、

前記複数のピクチャをそれぞれ符号化することで複数のピクチャ符号化データを生成する符号化ステップと、

前記ピクチャ符号化データごとに、当該ピクチャ符号化データを復号するために参照されるパラメータ群たるピクチャパラメータセット情報を生成する情報生成ステップと、

前記ランダムアクセスユニットを構成する複数の格納単位のそれぞれに、前記複数のピクチャ符号化データを1つずつ格納する第1の格納ステップと、

所定の条件に基づき、

前記ピクチャパラメータセット情報を、前記複数の格納単位のうち先頭の格納単位、ま

たは、当該ピクチャパラメータセット情報を参照するピクチャ符号化データが格納されている格納単位に格納する第2の格納ステップと、

前記第1および2の格納ステップにより生成されたストリームを記録媒体に記録する記録ステップとを含み、

前記第2の格納ステップでは、前記先頭の格納単位に複数のピクチャパラメータセット情報を格納し、前記先頭の格納単位に格納するピクチャパラメータセット情報の数に制限を有する

ことを特徴とする記録媒体への記録方法。

## CLAIMS

1. A picture coding apparatus which codes pictures on a picture-by-picture basis, and generates a random access unit as a part of a stream, the random access unit including the coded pictures, said apparatus comprising:

a coding unit operable to generate pieces of coded picture data by coding the pictures on a picture-by-picture basis;

an information generation unit operable to generate pieces of picture parameter set information, each of which is a parameter group to be referenced for decoding each piece of the coded picture data;

a first storage unit operable to store the pieces of the coded picture data respectively into access units that constitute the random access unit; and

a second storage unit, based on a predetermined condition, operable to store each pieces of the picture parameter set information into a first access unit that is located at a head of the random access unit, or into an access unit in which a piece of the coded picture data that refers to the piece of the picture parameter set information is stored,

wherein said second storage unit is operable to store a plurality of the pieces of the picture parameter set information into the first access unit, and to limit the number of pieces of the picture parameter set information stored in the first access unit.

2. A picture decoding apparatus which accesses a stream by a random access unit, the stream generated by said picture coding apparatus according to Claim 1, and decodes pieces of coded picture data, said apparatus comprising:

a picture specification unit operable to specify a part of the pieces of the coded picture data to be decoded from the pieces of the

coded picture data so as to specify a piece of the coded picture data stored in a first access unit that is located at a head of the random access unit;

an obtainment unit operable to obtain, from the first access unit or an access unit which stores the coded picture data to be decoded, picture parameter set information which is a parameter group referenced for decoding the coded picture data to be decoded; and

a decoding unit operable to decode the coded picture data to be decoded by referring to the picture parameter set information.

3. A picture coding method for coding pictures on a picture-by-picture basis, and generating a random access unit as a part of a stream, the random access unit including the coded pictures, said method comprising:

generating pieces of coded picture data by coding the pictures on a picture-by-picture basis;

generating pieces of picture parameter set information, each of which is a parameter group to be referenced for decoding each piece of the coded picture data;

first storing the pieces of the coded picture data respectively into access units that constitute the random access unit; and

second storing, based on a predetermined condition, each pieces of the picture parameter set information into a first access unit that is located at a head of the random access unit, or into an access unit in which a piece of the coded picture data that refers to the piece of the picture parameter set information is stored,

wherein, in said storing, a plurality of the pieces of the picture parameter set information are stored into the first access unit in said second storing, and the number of pieces of the picture parameter set information, stored in the first access unit, is limited.

4. A picture decoding method for accessing a stream by a random access unit, the stream generated by said picture coding apparatus according to Claim 3, and decoding pieces of coded picture data, said method comprising:

5 specifying a part of the pieces of the coded picture data to be decoded from the pieces of the coded picture data so as to specify a piece of the coded picture data stored in a first access unit that is located at a head of the random access unit;

obtaining, from the first access unit or an access unit which  
10 stores the coded picture data to be decoded, picture parameter set information which is a parameter group referenced for decoding the coded picture data to be decoded; and

decoding the coded picture data to be decoded by referring to the pieces of picture parameter set information.

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5. A recording method for coding pictures on a picture-by-picture basis, and recording a stream including a random access unit having the coded pictures into a computer-readable recording medium, said recording method comprising:

20 generating pieces of coded picture data by coding the pictures on a picture-by-picture basis;

generating pieces of picture parameter set information, each of which is a parameter group to be referenced for decoding each piece of the coded picture data;

25 first storing the pieces of the coded picture data respectively into access units that constitute the random access unit; and

second storing, based on a predetermined condition, each pieces of the picture parameter set information into a first access unit that is located at a head of the random access unit, or into an  
30 access unit in which a piece of the coded picture data that refers to the piece of the picture parameter set information is stored,

wherein, in said second storing, a plurality of the pieces of the



picture parameter set information are stored into the first access unit in said second storing, and the number of pieces of the picture parameter set information, stored in the first access unit, is limited.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of Tadamasa TOMA et al.

Serial NO.: 10/581,910

Filing Date: June 7, 2006

For: PICTURE CODING APPARATUS AND PICTURE DECODING APPARATUS

VERIFICATION OF TRANSLATION

Honorable Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

Masakuni YAMAGUCHI residing at 1-6-1, Minamitomigaoka, Nara-shi, Nara,  
631-0023, Japan declares:

- (1) that he knows well both the Japanese and English languages;
- (2) that he translated the patentable claims from JP2006-519671 from Japanese to English;
- (3) that the attached English translation is a true and correct translation of the patentable claims from JP2006-519671 to the best of his knowledge and belief and
- (4) that all statements made of his own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and that such false statements may jeopardize the validity of the application or any patent thereon.

This 11<sup>th</sup> day of August, 2008

  
Masakuni Yamaguchi

## 拒絶理由通知書

特許出願の番号	特願 2006-519671
起案日	平成20年 2月29日
特許庁審査官	畑中 高行 3863 5C00
特許出願人代理人	新居 広守 様
適用条文	第36条

<<<< 最 後 >>>>

この出願は、次の理由によって拒絶をすべきものです。これについて意見がありましたら、この通知書の発送の日から60日以内に意見書を提出してください。

### 理 由

この出願は、特許請求の範囲の記載が下記の点で、特許法第36条第6項第2号に規定する要件を満たしていない。

### 記

請求項7には「前記先頭の格納単位には複数のピクチャパラメータセット情報が格納され、前記先頭の格納単位に格納するピクチャパラメータセット情報の数に制限を有する構造であり」との記載があるが、記録媒体に記録された情報自体から、格納数に制限を有しているか否かを判別できるとはいえず、何をもって格納数に制限を有する構造であると判断するのか不明であるから、数に制限を有する構造がいかなるものであるのか不明である。

よって、請求項7に係る発明は明確でない。

### <拒絶の理由を発見しない請求項>

請求項1-6に係る発明については、現時点では、拒絶の理由を発見しない。拒絶の理由が新たに発見された場合には拒絶の理由が通知される。

### 最後の拒絶理由通知とする理由

最初の拒絶理由通知に対する応答時の補正によって通知することが必要になっ

整理番号: 発送番号:124080 発送日:平成20年 3月 4日 2/E

た拒絶の理由のみを通知する拒絶理由通知である。

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この拒絶理由通知の内容に関するお問い合わせ、または面接のご希望がございましたら下記までご連絡下さい。

特許審査第四部 映像機器 横田 有光

TEL. 03 (3581) 1101 内線3539

## **Notification of Reasons for Refusal**

Patent Application No.      Japanese Patent Application No.  
2006-519671  
5   Drafting Date              February 29th, 2008  
Examiner of JPO              HATANAKA, Takayuki  
Representative/Applicant NII, Hiromori  
Applied Provisions              Patent Law Article 36

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### **Final**

This application should be refused for the reasons mentioned below. If the applicant has any argument against the reasons, such argument should be submitted within 60 days from the date on which this notification was dispatched.

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### **Reason**

This application does not comply with the requirements under Patent Law Article 36(6) (2) on the points mentioned below.

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### **Note**

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Description in Claim 7, "...the pieces of the picture parameter set information are stored into the first access unit that is located at a head of the access units, so that the number of pieces of the picture parameter set information, stored in the first access unit, is limited" fails to elaborate on how the number of pieces of the picture parameter set information is limited. This is because whether or not the number of pieces of the picture parameter set information stored in the first access unit is limited cannot be judged by information stored in a recording medium, and thus, it is not clear  
30 what causes the number to be limited.

Thus, Claim 7 lacks clarity.

<Claims not subject to refusal>

For Claims 1 to 6, no reason for refusal is found at present.  
If any reason for refusal is found later, it will be notified.

5      **Reasons for the final Notification of Reasons for Refusal**

This Notification of Reasons for Refusal is to notify the reasons for refusal that became apparent after considering the amendment filed as a response to the first Notification of Reasons for refusal.

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Any inquiry concerning this notification of reasons for refusal should be directed to Mr. YOKOTA, Yamada of Audio Visual Division, Fourth Examination Department.

Tel. 03 (3581) 1101 ex. 3539

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of Tadamasa TOMA et al.

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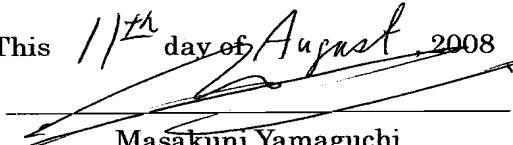
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